East Asian Countries Widen Global Advantage in Mathematics Achievement at Eighth Grade

TIMSS 2015 Mathematics has achievement results for 39 countries at the eighth grade.

The gap between the East Asian countries and the next highest country was 48 in 2015, increasing from 31 in 2011.

TIMSS 2015 Mathematics Achievement

Singapore 621
Korea 606
Chinese Taipei 599
Hong Kong SAR 594
Japan 586
Russian Federation 538

Please see Exhibit 1.4 for statistically significant differences.

Mathematics Achievement Trends by Gender

Trends at Eighth Grade Show Increases in Mathematics Achievement Around the World

Trends 2011-2015: 34 Countries

18 Countries Higher Average Achievement
Bahrain, Chile, Georgia, Georgia, Iran, Japan, Kazakhstan, Lithuania, Malaysia, Morocco, Norway, Oman, Qatar, Singapore, Slovenia, South Africa, Sweden, United Arab Emirates, the United States

13 Countries Same Average Achievement
Australia, Botswana, England, Hong Kong SAR, Hungary, Israel, Italy, Korea, Lebanon, New Zealand, Russian Federation, Thailand, Turkey

3 Countries Lower Average Achievement

Trends 1995-2015: 16 Countries

9 Countries Higher Average Achievement
England, Hong Kong SAR, Iran, Korea, Lithuania, Russian Federation, Singapore, Slovenia, the United States

4 Countries Same Average Achievement
Australia, Ireland, Japan, New Zealand

3 Countries Lower Average Achievement

Little Difference in Mathematics Achievement by Gender

Of the 39 TIMSS 2015 Countries:

• 26 countries had no difference between girls and boys in higher achievement.
• Girls had higher achievement in 7 countries, with an average difference of 17 points.
• Boys had higher average achievement in 6 countries, with an average achievement of 9 points.

Trends 2011-2015: 34 Countries
For 25 of the 34 countries with comparable data in 2011 and 2015, the gender gaps did not change.

• 16 countries had no difference in average mathematics achievement between girls and boys in either 2011 or 2015.
• In 7 countries girls had higher achievement in both assessments compared to 2 countries for boys.

Trends 1995-2015: 16 Countries
• In 1995, boys had higher achievement than girls in 4 countries with an average achievement advantage of 17 points. There was no difference in 12 countries.
• In 2015, boys had higher achievement than girls in 3 countries, with an average achievement advantage of 9 points. Girls had higher achievement in Singapore, with an average achievement advantage of 10 points.